

OUR WORK

The Pre-Job Brief and Post-Job Review

Our Work — Part 1 The Pre-Job Brief and Post-Job Review Transcript

Narrator When we work, when we are at our best, we bring ourselves, our expertise, our creativity to what we do. We do excellent work, and the quality of our work depends upon not only WHAT we do, but also HOW we do it:

- HOW we combine our skills, training, and insight
- HOW we combine them with collaboration, working relationships, and shared values
- HOW we combine both our technical resources and human talents

This combination comes in many shapes and sizes, but the most effective way is to simply do our work, where nothing lies outside of our excellent work. So excellence in research and crafts, good working relationships, safe, secure, and environmentally responsible work are all simply part of our work — no add-ons, no extras, just good consistent work.

There are many practices that support this all-encompassing approach. And the pre-job brief and post-job review are two of them.

The pre-job brief helps us to prepare for each project and activity, while the post-job review allows us to learn from each activity, and carry those lessons into our next project.

Here's an example of a pre-job brief and post-job review. It's a dramatization based upon a real project and potential conditions, and viewed through the familiar lens of Integrated Safety Management and the 5-step process.

OUR WORK

The Pre-Job Brief and Post-Job Review

THE PRE-JOB BRIEF DEFINE WORK

The first step of the pre-job brief it is to define the work, asking key questions, such as...

What are the critical steps or phases of this work?

And...what lessons learned can we bring to this work, from past post-job reviews?

Mark Stephanie and Janice, I appreciate you industrial hygienists showing up for us today. I know you wanted to look at our procedure, and actually watch us do a shot.

Stephanie, so I understand that you're here to help us with our industrial hygiene. I don't know if you're just looking at soot or what you're going to do.

Stephanie I'm going to be taking air samples, and we'll go into more specifics about those later.

Mark Okay. Janice you're going to be helping us look at safety and you're going to be a pair of eyes just looking overall, right?

Janice Yes, we're really excited to be part of the work team.

Critical Thinking and Discussion:

Narrator One purpose of the pre-job brief is to stimulate **Critical Thinking and Discussion**

- To identify changes in the work

OUR WORK

The Pre-Job Brief and Post-Job Review

- Revisit known hazards and controls
- Explore the potential of new hazards

To help this along, the Person-in-Charge, the PIC, can add new experts to the team in order to add fresh eyes and critical thinking within the team.

Mark We appreciate you coming to help us out with this. We just want to make sure that we're safe in our operations.

Stephanie I'm looking forward to continuing to support the team as far as industrial hygiene goes with the project.

Mark Good. Thank you. I know that you have read the new procedure that we've written and you've read our IWD. Steve and I went through and did a new procedure. We've been operating this gun for a long time, but we wanted you to watch, and then I know that you had some industrial hygiene questions for us later on after the shot. So, we just want to do a pre-job brief about what we're going to do today.

Frequency

Narrator Here, we can immediately see reasons for conducting a pre-job brief and post-job review, and reasons for how often we perform them. All of this depends upon the work itself.

Any time there's a significant change, such as...

- new work
- a change in work,
- a change in scope, or
- a change in participants

...a pre-job brief is necessary to ensure our good consistent work.

OUR WORK

The Pre-Job Brief and Post-Job Review

When there is a change in participants, either everyone on the team can meet together, or a pre-job brief can be provided for the new participant separately.

In this case, two new team members have been asked to participate in the shot in order to check air levels and review the project from both an industrial hygiene and safety perspective. In addition, a new procedure needs to be integrated into the work.

Mark Today we're firing a shot on the two-stage gun, it's an experiment for Paulo, and Steve will actually be firing the gun.

Basically how this gun works is we fill this tube with hydrogen, and we use propellant charge to drive the piston to compress the hydrogen. It breaks the diaphragm in the mid-section. It sends the secondary projectile at extremely high velocity into the target chamber. So that's basically how the gun works.

Stephanie How much hydrogen do you keep on hand and where is it stored?

Steve We have two hydrogen bottles, they're outside, they're at the northeast corner of the building. And the valve that we control from the control room is located outside the building. We do have the hydrogen lines coming into here, but all the controls are outside.

Stephanie Because hydrogen is so flammable, how do you mitigate the flammability hazard?

Steve If we have to vent the pump tube, our vent lines go outside, they go up to the roof level. It comes out at such a low rate that it dilutes in the air quickly.

OUR WORK**The Pre-Job Brief and Post-Job Review**

After the shot when everything works real nice, like it will, the hydrogen is in the target chamber, and we actually purge with nitrogen. We bring the target chamber back up to atmospheric level, and then we open an event valve. That valve, that vent line, goes out to the roof on the other end of the building — it's up at the highest point.

Stephanie Okay.

Mark So Paulo can explain to you what his experiment is. Okay?

Sharing Leadership

Narrator Though it is important for the Person-In-Charge, the PIC, to conduct the brief and review with strong leadership, it is also important for the PIC to share that leadership amongst the team members, helping to increase their participation throughout the meeting.

Paulo Okay, so today we're going to do an impact experiment with zirconium impacting a lithium fluoride window. This is part of a research project that I've been doing for several years. And one of the exciting things about doing shots on this gun is that it's a very high velocity gun. And so I have a set of data that I've taken at the lower pressures and now we're able to go to higher pressures. This is a shot where we're actually going to evaluate the performance of this gun, as far as the quality of data that we're getting.

Mark So we're working under a new procedure. What we did was we came down and we actually set the gun up like we were going to do a shot, and we wrote this new procedure. But the reason we did that was we wanted to make sure we were covered on everything we're doing, because there has been some things that we've learned in the past that we thought, you know what, we don't want to make that mistake again. So, we're using a

OUR WORK

The Pre-Job Brief and Post-Job Review

new procedure today that Steve wrote. It's consistent with our IWD. We haven't changed anything; we've just added more detail to our procedure. We've done two dry runs where we're getting ready to fire the gun and do everything. Today is the real shot. That's why we asked you to be here with us.

Incorporating Previous Lessons Learned

Narrator For repeat work, such as this, lessons learned from previous post-job reviews are brought forward and integrated into the upcoming work.

Paulo And so this is exciting for us because it's the first time that we've shot it in several months, and it's really going to add to my data set.